

**REMARKS****Status of the Claims**

Claims 56-64, 66, and 88-108 are currently pending in the present application. Claims 1-55, 65, and 67-87 have been canceled without prejudice or disclaimer of the subject matter claimed therein. Claims 56-62, 64, and 66 have been amended, and new claims 88-108, directed to methods of using the cDNA-mRNA hybrid of claim 56 and to kits comprising the cDNA-mRNA hybrid of claim 56, have been added.

**Amendments to the Claims**

The amendments to claims 56-62, 64, and 66 and the insertion of new claims 88-108 do not introduce prohibited new matter. Support for the amendments to the claims and the addition of new claims 88-108 can be found throughout the specification. Representative support is summarized below.

Representative support for the amendments to claims 56-62 and 66 can be found in claim 60 and in claim 1 as originally filed. Representative support for the amendments to claim 56 can also be found on page 11, lines 23 and 24.

Representative support for the amendment to claim 64 can be found on page 30, lines 27-29 of the specification.

Representative support for new claims 88-108 is summarized in the table below.

Claim(s)	Representative Support
88	Claim 67
89	Claim 68
90	Claim 69
91	Claim 70
92	Claim 71
93	Claim 72

94	Claim 73
95	Claim 74
96	Claim 75
97	Claim 77
98	Claim 78
99	Claim 79
100	Claim 80
101	Claim 81
102	Claim 82
103	Claim 83
104	Claim 84
105	Claim 85
106	Claim 86
107	Claim 87
108	Page 6, line 12

### Rejoinder

Applicants respectfully point out that MPEP 821.04(b) requires that once a product claim is found allowable, withdrawn method claims which depend from or otherwise include all the limitations of the allowable product claim must be rejoined. Thus, once a claim directed to the cDNA-mRNA hybrid (claims 56-64, and 66) is found allowable, method claims directed to methods of using the hybrid (claims 88-108) which depend from or otherwise include all the limitations of the allowed claim must be rejoined.

### Priority

As requested, Applicants have updated the first paragraph of the specification to include a

reference to PCT/GB2004/003486. However, Applicants respectfully point out that it is not necessary to amend the first sentence(s) of the specification to reference the international application number that was used to identify the application during international processing of the application by the international authorities prior to commencement of the national stage (see MPEP 1893.03(c)(III), page 1800-207 (8th Ed.)).

Rejections of the Claims Under 35 U.S.C. § 112, Second Paragraph

Claims 56-66 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The Office Action alleges that the claims are confusing for reciting “a first strand cDNA synthesis hybridized to RNA.” Claims 56, 60-62, and 56 have been amended to recite “a cDNA hybridised to a RNA”.

The Office Action alleges that claim 64 is confusing for reciting “further comprising an amplification primer.” Claim 64 has been amended to recite “further comprising a sequence for hybridising an amplification primer”.

The Office Action alleges that claim 65 is confusing because it is not further limiting. Claim 65 has been canceled without prejudice or disclaimer of the subject matter claimed therein.

Rejection of the Claims Under 35 U.S.C. § 103(a)

Claims 56-66 are rejected 35 U.S.C. § 103(a) as being unpatentable over Zhu *et al.* (Zhu) in view of Chenchik *et al.* (Chenchik I) or Petalidis *et al.* (Petalidis) or Chenchik *et al.* (Chenchik II).

As acknowledged by the Office Action, Zhu does not disclose or suggest a cDNA-mRNA hybrid containing an amplifier sequence and a template switching oligonucleotide (TSO) having the same sequence to allow amplification using a single amplification primer. As evidenced in col. 3, lines 4-12 and in col. 4, lines 28-43, Zhu only teaches the use of two different primers for generating PCR libraries containing RNA molecules. Zhu does not teach addition of an amplifier sequence to the 5' end of the cDNA synthesis primers, wherein the TSO contains the same

sequence as the amplifier sequence to allow amplification using a single amplification primer. Accordingly, Zhu does not render the claimed invention obvious.

Chenchik I only teaches the use of a cDNA-mRNA hybrid for generating cDNA libraries. Chenchik does not teach generating antisense RNA molecules using a RNA promoter that is recognized by a bacteriophage RNA polymerase, such as the T7 polymerase. Accordingly, the cDNA-mRNA hybrid of Chenchik I is not the same as the presently claimed cDNA-mRNA hybrid, and Chenchik I does not cure the deficiencies of Zhu.

Petalidis only discloses the use of cDNA-mRNA hybrid in template-switching (TS) PCR for generating double-stranded cDNA. Petalidis does not teach or suggest a cDNA-mRNA hybrid for generating antisense RNA molecules using a RNA promoter that is recognized by a bacteriophage RNA polymerase, such as the T7 polymerase. Accordingly, the cDNA-mRNA hybrid of Petalidis is not the same as the presently claimed cDNA-mRNA hybrid, and Petalidis does not cure the deficiencies of Zhu.

Chenchik II only teaches the use of a cDNA-mRNA hybrid for double-stranded cDNA. Chenchik II does not teach generating antisense RNA molecules using a RNA promoter that is recognized by a bacteriophage RNA polymerase such as the T7 polymerase. Accordingly, the cDNA-mRNA hybrid of Chenchik II is not the same as the presently claimed cDNA-mRNA hybrid, and Chenchik II does not cure the deficiencies of Zhu.

Moreover, there is no reason to combine the reference of Zhu with the reference of Chenchik I, Petalidis, or Chenchik II and to modify the teachings of Zhu based on the teachings of Chenchik I, Petalidis, or Chenchik II to arrive at the claimed invention with reasonable expectation of success. Although Zhu discloses generating RNA molecules, the deficiencies of Zhu are discussed above. In contrast to Zhu who teaches generating RNA molecules, Chenchik I, Petalidis, and Chenchik II are directed to generating double-stranded cDNA molecules. Accordingly, there is no reason to combine Zhu with Chenchik I, Petalidis, or Chenchik II. Thus, the cited references do not render the claimed invention obvious.

### Conclusion

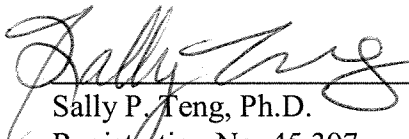
The foregoing amendments and remarks are being made to place the application in condition for allowance. Applicants respectfully request entry of the amendments,

reconsideration, and the timely allowance of the pending claims. A favorable action is awaited. Should an interview be helpful to further prosecution of this application, the Examiner is invited to telephone the undersigned.

If there are any fees due in connection with the filing of this Amendment, please charge the fees to our Deposit Account No. 50-310. If a fee is required for an extension of time under 37 C.F.R. 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Dated: **May 19, 2008**  
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Respectfully submitted,  
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